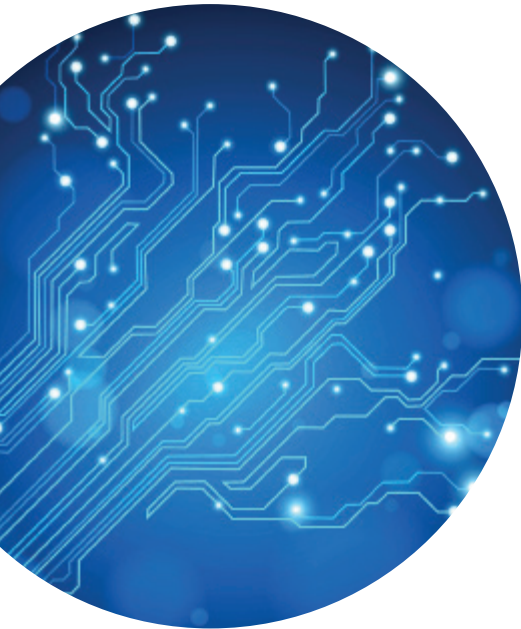




# Smart Grid Benefits You Today...and Tomorrow



Technology has transformed our way of life, but our electric grid — which we trust to keep power flowing to our homes, schools, workplaces, and hospitals — hasn't been modernized to match. Now it can be, with a new investment in our nation's energy infrastructure called smart grid. It combines information technology with power transmission to benefit your home, your community, and your nation. Read on, and you'll agree that there are many reasons why this new plan for the grid deserves to be called smart.

## Smart grid keeps your lights on.

It overhauls aging equipment.

The current electrical system is decades old and dependent upon equipment that is approaching the end of its usable life. Smart grid updates this infrastructure, ensuring that safety standards continue to be met, that power is delivered consistently, and that the system is managed efficiently.

It equips the grid to meet increasing demand.

As Americans today use more electronic devices than ever, the demand for power continues to grow rapidly. Without smart grid improvements, the old system, already strained to near-capacity, will be unable to meet the challenges of the future.

It decreases brownouts, blackouts, and surges.

You don't always know when a brownout or power surge is happening, but they can leave damaged TVs, audio equipment, and computers in their wake. Smart grid applications smooth the flow of power, and when aberrations do occur, they are more quickly and easily dealt with.

## Smart grid lowers energy costs.

It gives you control over your power bill.

Smart grid makes it possible to monitor and adjust your energy use through smart meters and home energy management systems that offer 24/7 rate and usage readings. That means no surprises on your electric bill and even better, you can schedule your most energy-intensive tasks for low-demand periods when you pay less. Control of your electric usage is in your hands and dollars stay in your wallet, month after month.





### It facilitates real-time troubleshooting.

When something goes wrong in today's electrical system, a utility worker must drive to the location of the problem to collect data before a solution can be devised. Smart grid improvements convert system events into instantly-retrievable digital information, so that problem solving can begin immediately. With such improved efficiency comes reduced producer costs — savings that will be passed on to you.

### It reduces expenses to energy producers.

To meet spikes in energy consumption, today's system relies on the building and maintenance of expensive standby plants which sit idle except during rare critical demand periods. Smart grid allows direct communication with end-user equipment to reduce consumption during these peak periods, lowering the need for costly standby power plants.

## Smart grid secures America's energy independence.

### It facilitates broad-scale electric vehicle charging.

Like many Americans, you may be contemplating replacing your gas guzzler with an efficient electric vehicle. Once you do make the switch, you'll need a reliable, low-cost way to recharge it anytime, anywhere. When you and millions of other owners plug in to charge your electric vehicles, smart grid will be ready to handle the new demand.



### It makes renewable power feasible.

Sophisticated smart grid systems are needed in order to strategically manage the diverse and geographically scattered renewable power sources like wind farms, solar plants, and hydro stations. Smart grid will ensure that this energy can be stored safely and distributed where and when it's needed.

### It maintains our global competitiveness.

Today, even developing countries are building their energy infrastructure on faster, more modern technologies. Our electric grid once gave us a competitive advantage, but now it's causing us to fall behind. Smart grid safeguards our nation's position at the forefront of the world's transition toward a clean energy future.



Working for a consumer-friendly, consumer-safe smart grid.

SGCC is a consumer focused non-profit organization aiming to promote the understanding and benefits of modernized electrical systems among all stakeholders in the United States. Membership is open to all consumer and environmental advocates, technology vendors, research scientists, and electric utilities for sharing in research, best practices, and collaborative efforts of the group.

Join @ [www.smartgridcc.org](http://www.smartgridcc.org).

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Reliability, cost savings, and energy independence are just three of the many benefits of smart grid. These and more make it the energy technology not just for the future, but for today.